**CROCKETT COUNTY HIGH SCHOOL**

**SYLLABUS**

# Ecology  Ms. Hailey Watts

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### **Room** 203hailey.watts@crockettschools.net

# **COURSE DESCRIPTION**: Biology is the scientific study of all living things. Students taking biology will be introduced to these basic topics: ecology, cellular biology, and genetics. The content of this course will be covered through lecture, interactive science notebooks, and hands-on activities (‘labs’). The purpose of this course is to give students a better understanding and appreciation for the life sciences while developing inquiry skills.

**SUPPLIES:** 3-Ring Binder

 Colored pencils

 Dividers

 College Ruled Composition/Journal Notebook

 Pencils/Pens

**CLASSROOM POLICIES:**

1. All work should be turned in on the assigned due date with a name and title.
2. Work turned in within a week of the due date will be penalized by 50%
3. Tests and quizzes missed due to an excused absence must be made up within one week of the students return.
4. Consequences for breaking the conduct rules may result in a level 1 or level 2 demerit.
5. You must be in your seat when the bell rings and ready to work.
6. No sleeping is ever allowed and taking notes and participating in class is required…
7. If you leave class for any reason you must sign out and have my permission.
8. Be attentative, and respectful in class!

C**CHS OFFICIAL GRADING SCALE**

# 93-100 = A

# 85-92 = B

# 75-84 = C

# 70-74 = D

# 69-0 = F

**GRADING CATEGORIES:**

25% - *DAILY CLASS WORK*

50% - *TEST GRADES*

 25% - *EXAM GRADE*

## **MAJOR UNITS AND PROJECTS**

 **1ST QUARTER**

 **Science of Biology**

Students will focus on:

* Scientific Method
* Characteristics of Life
* Tools and Procedures used in science

**Chemistry of Life:**

 Students wil study the:

* Nature of Matter
* Properties of Water
* Carbon Compounds
* Chemical Reactions and Enzymes

**Ecology:**

 Students will examine:

* Food Chains
* Energy Flow
* Cycles of Matter
* Food Webs/Niche/Populations
* Population Growth

 **2nd QUARTER**

 **Cells:**

Students will:

* Identify the structures and functions of cellular organelles.
* Explain the purpose of the cell membrane
* Compare and contrast various forms of cellular transport

**Photosynthesis and Cellular Respiration:**

Students will examine:

* The basic principles of energy and life
* Compare and contrast the pathways of photosynthesis and cellular respiration
* The Krebs Cycle and Electron Transport

 **Mitosis:**

Students will examine:

* Cell Growth
* Cell Division
* Regulating the Cell Cycle

 **Introduction to Genetics:**

Students will:

* Study the work of Gregor Mendel
* Solve the probability of Punnett Squares
* Explore Mendellian Genetics
* Study the process of meiosis
* Explore linkage and gene maps

 **DNA and RNA:**

Students will:

* Explore the connection between DNA and people
* Compare and contrast the structures of DNA and RNA
* Trace the process of transcription and translation
* Read pedigrees
* Study the cause and effects of mutations

 **Evolution:**

Students will:

* Study the ideas that shaped Darwin’s Theory
* Examin the various types of evolution
* Use Dichotomous Keys to classify living organisms
* Apply the Hardy-Weinberg equation to determine if evolution is occurring

**TESTING DATES.:These are tentative**

 **August 12th: Chapter 1Test**

 **August 23rd:Chapter 2 Test**

 **September 9th:Chapter 3 Test**

 **September 20th: Chapter 4 Test**

 **September 27th: Chapter 5 Test**

 **October 6th-7th: Mid-Terms**

 **October 18th: Chapter 6 Test**

 **November 1st: Chapter 7 Test**

 **November 7th: Chapter 8 Test**

 **November 15th: Chapter 9 Test**

**PARENT RESOURES:**

[**http://crocketthigh.ccschools.net/**](http://crocketthigh.ccschools.net/)

I have read over the syllabus and I have noted that classroom behavior and student responsibility are significant factors in determining the final grade. I also have read and understand the class policies. I also understand that I can contact the teacher at Lisa.voss@crockettschools.net or call CCHS at 731-696-4525 to set-up a meeting with the teacher.

Student name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Parent signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_